

GEANT 3.21 Simulations of Balbekov's Ring.

On-axis, on-momentum particle tracking
(continue).

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Ring Coolers/Emittance Exchange group meeting
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Longitudinal deviation from injection point
for on-axis, on-momentum particle

| | z=0 cm | +7 cm | 2 cm | -2 cm | -7 cm |
|----|----------|---------|--------|--------|---------|
| 1 | 0.01352 | 7.347 | 2.126 | -2.164 | -7.518 |
| 2 | -0.01467 | 7.283 | 2.108 | -2.217 | -7.935 |
| 3 | -0.00850 | 6.983 | 1.919 | -2.116 | -8.218 |
| 4 | 0.00000 | 6.744 | 1.554 | -1.656 | -8.041 |
| 5 | 0.00464 | 6.831 | 1.130 | -1.210 | -7.536 |
| 6 | -0.01237 | 8.029 | 0.547 | -0.585 | -6.794 |
| 7 | 0.00619 | 10.964 | -0.360 | 0.0559 | -5.981 |
| 8 | 0.01546 | 16.171 | -1.378 | 0.799 | -5.203 |
| 9 | 0.01237 | 18.935 | -2.366 | 1.563 | -4.789 |
| 10 | 0.00310 | 13.734 | -3.518 | 2.034 | -2.695 |
| 11 | 0.01548 | -1.057 | -5.042 | 2.514 | -4.117 |
| 12 | 0.00309 | -19.041 | -6.127 | 3.176 | -6.634 |
| 13 | -0.00928 | -36.181 | -7.130 | 3.595 | -10.439 |
| 14 | -0.00619 | 15.229 | -7.618 | 3.625 | -14.568 |
| 15 | -0.01237 | -3.833 | -7.587 | 3.857 | -18.709 |

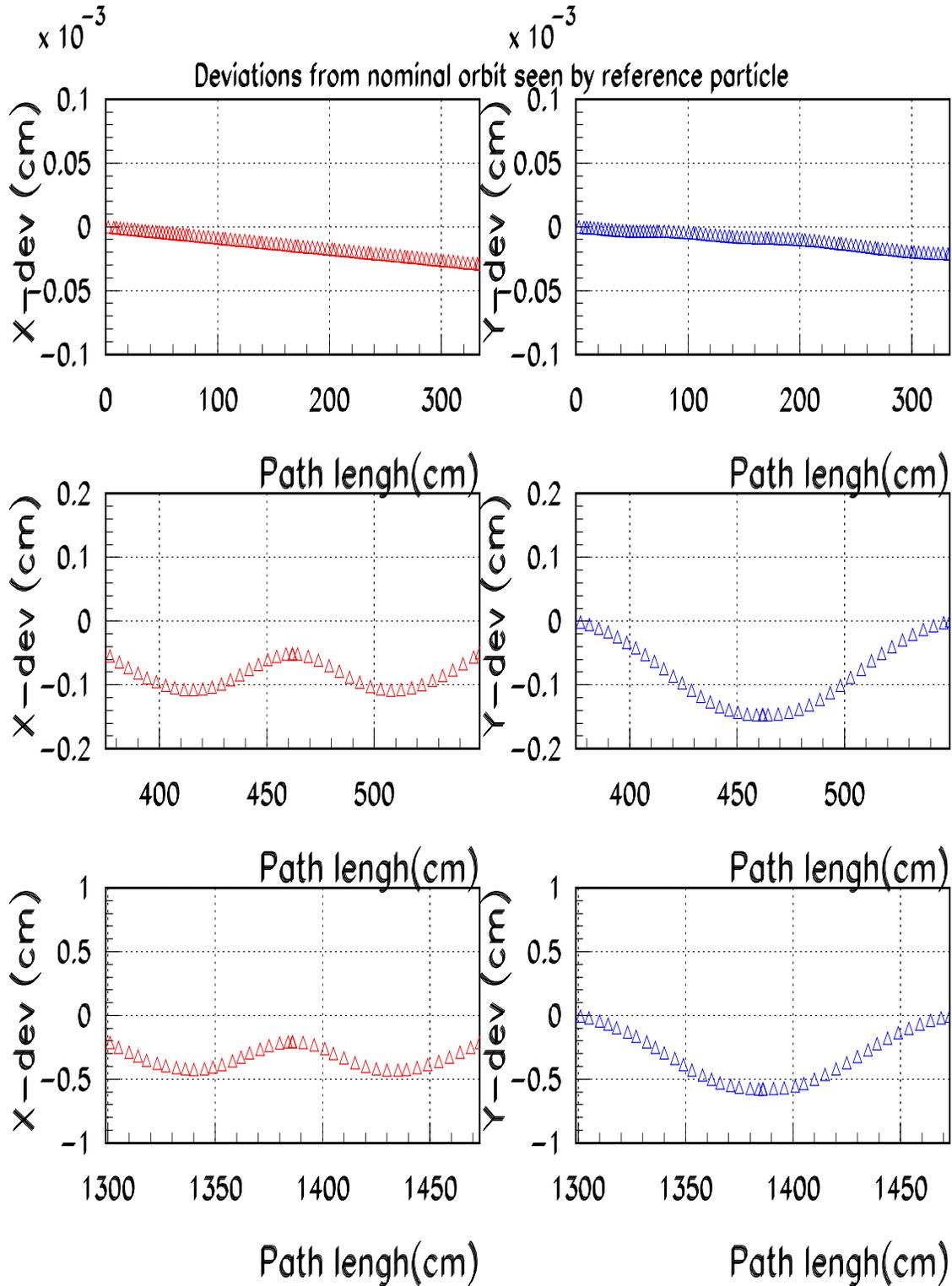


Fig.1 Deviation from nominal orbit in long solenoid and two next short solenoid parts.

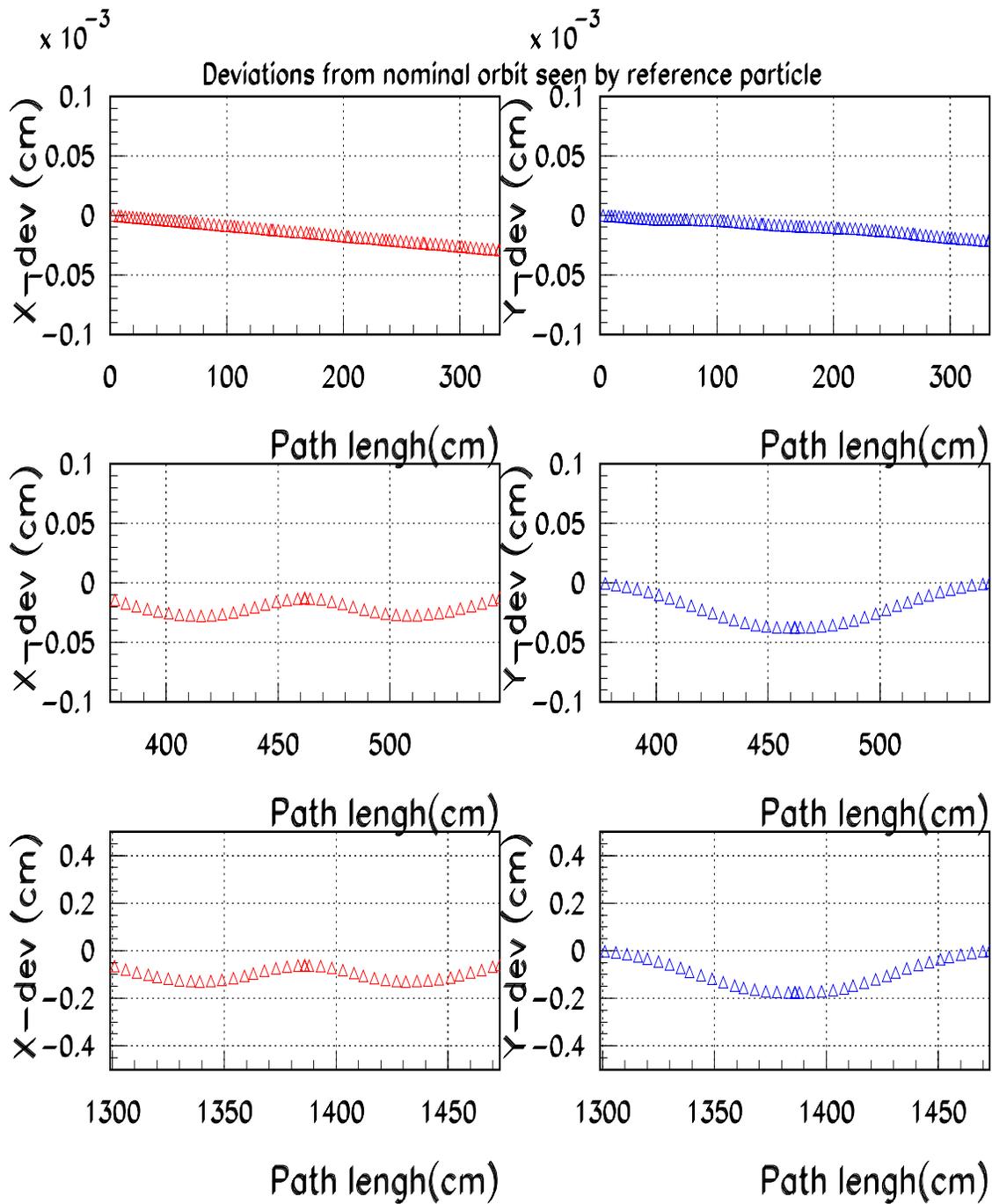


Fig.2 As in Fig.1, No absorber, $\Theta_{accel} = 0.00$)

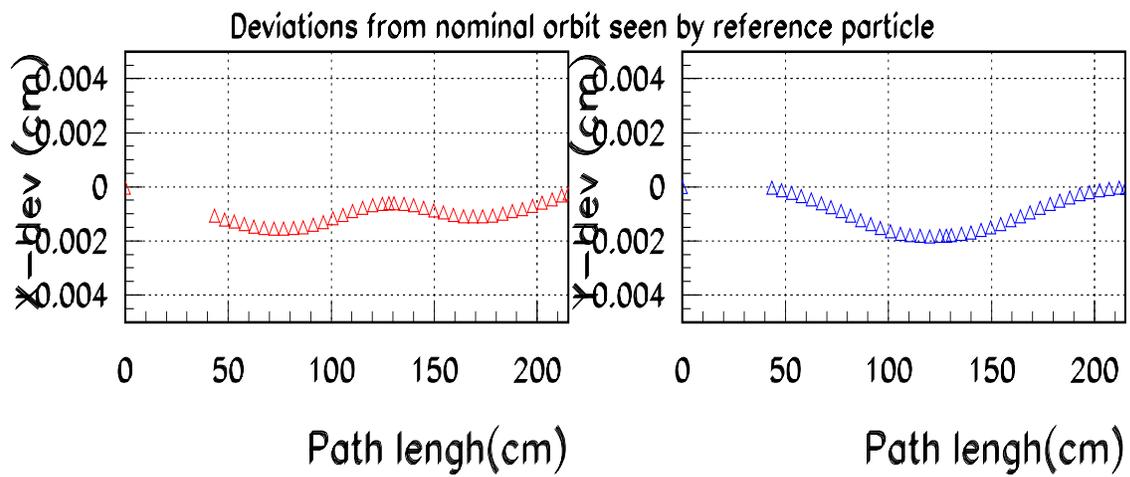


Fig.3 Deviation from nominal orbit in short solenoid just after bending, injection just before bending.